ECONOMIC INTELLIGENCE COMMITTEE Subcommittee on Petroleum

MILITARY CONSUMPTION OF PETROLEUM PRODUCTS

SINO-SOVIET BLOC 1950-1955

EIC-PSC-WP 1

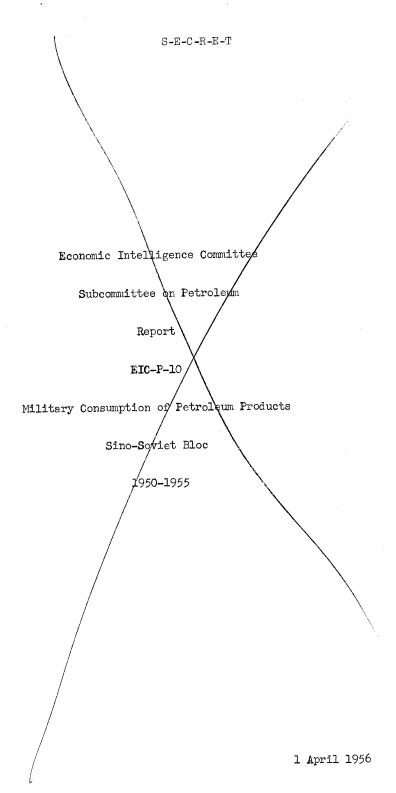
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| Ÿ .~ | European | Satell: | ite Air | Forces. | | | e 0 | | 1 950 | ۰ | • | | 35 |
| | | | | • | | | | | 1951 | | ٠ | • | 36 |
| | | | | | | | | | 1952 | | ۰ | • | 37 |
| | | | | | | | | | 1953 | ۰ | ۰ | 0 | 38 |
| | | | | | | | | | 1954 | • | 0 | • | 39 |
| | | | | | | | | | 1955 | 0 | ٠ | ٠ | 40 |
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| C-3 | Estimated Communis | Annual | Consump | otion oi | Petro | Leum Air | Proa For | ucu | 3, | | | | |
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FOREWORD

This report provides estimates of the consumption of petroleum products by the military and paramilitary Services of the countries of the Sino-Soviet Bloc for the years 1950 through 1955.

The report was prepared under the sponsorship of the Economic Intelligence Committee Subcommittee on Petroleum to meet a designated research deficiency. It is intended that the report serve members of the intelligence community in petroleum supply/demand studies for countries of the Sino-Soviet Bloc.

The limitations of this first joint research effort on the part of the Subcommittee on Petroleum are recognized. However, the report is considered a useful instrument in its present form and can serve as the object of further refinement as better information becomes available.

INTRODUCTION

The estimates included in this report were developed independently by the appropriate intelligence authorities of the US Departments of Army, Navy, and Air Forces. The particular responsibilities for the preparation of consumption estimates for similar consumers in the Bloc follow:

Army - Appendix A. Sino-Soviet Bloc ground forces; militarized security forces (MVD).

Navy - Appendix B. Sino-Soviet Bloc naval forces ashore and afloat.

Air Force - Appendix C. Sino-Soviet Bloc air forces; naval air forces; civil vation; ferrying operations; aircraft engine testing.

Since consumption data, per se, was not available, the estimates represent calculations based on consideration of the probable numbers and types of equipment, estimated use thereof, and the petroleum product consumption per unit time or distance.

THE ESTIMATES

The estimates of consumption of petroleum products by the Army, Navy, and Air Forces of the countries of the Sino-Soviet Bloc for the years 1950 through 1955 are summarized in Table 1. Military consumption by product and by location of forces is summarized in Table 2.

The supporting data and methodology for Tables 1 and 2 are included in the appropriate appendixes.

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| S-C-R-E-T | | | ļ | | Table | | | 1 5 F C 1 5 F C | Ē | | Page 1 of | 1 Page | |
|----------------------------|--|-------------|---|-------------------------|-------------|---------------|----------------------|--|--------------------------|---|----------------------|---------------------------------------|--|
| | Ä | stimated Ar | Estimated Annual Consumption of Petroleum Froducts Sino-Soviet bloc Military Forces | nption of A | etroleum Fl | roducts alr | 19TAOC-0 | DIOC MILL | ary rorces | Tho | Thousand Metric Tons | ic Tons | |
| | | | | | | | | | | North | North | , , , , , , , , , , , , , , , , , , , | |
| nsumer a/ b/ | USSR c/ | Albania | Bulgaria | Czecho. | E. Germ. | Hungary | Poland | Rumania | China c/ | Korea | Vietnam | Total | |
| Q | | | | , | , | , | 1 | ; | ; | . \ | (| 1 | |
| round Forces | 7,18.9 | ກູພ ໝູນ | 25°0 | 28 . 9 | 0 0 | ه د د | 20°55 20°55 | 31.9 | 20°6 91°8 | ر د د د | o o | 1704.0 | |
| AVAL FULCES | 0.000 | 1 | ֓֞֜֞֜֞֜֜֞֜֝֓֓֓֓֓֓֓֓֞֜֜֜֓֓֓֓֞֜֜֜֓֓֓֓֓֓֞֜֜֜֓֓֡֓֡֓֞֜֜֜֓֡֓֡֓֡֓֡ | 3 | • | ٠, | , , | - α | 7 2 5 | , | · c | רונר. | |
| ir Forces Total | 1330.6 3624.1 | 7.30 | 39.6 | 50.7 | 800 | 15.4 | 92.7 | 7,19 | 126.0 | 20.7 | 9 | 1019.9 | |
| Ţ, | | 1 | | | | | , | | • | | (| , , , , | |
| Fround Forces | 748.9 | นัก | ב <u>י</u> נ" | γ•4ε 0 | ان د د د | 18,1 | £8.4 €.64 €.64 | 34.3 | 45.2 129.4 | ر م م ش | သို့ ဝ | 996.0 1912.0 | |
| ir Forces | 1690. | \ | 27.53 | 29,3 | 0 | 11.6 | 30.0 | 18,5 | 112,8 | 0 | 0 | 1913.9 | |
| Total | 1155.8 | 7.6 | 62,5 | 64.0 | 24.9 | 29.7 | 102.6 | 70.5 | 287.4 | 26.1 | œ. | 4821.9 | |
| 52 Fround Forces | 748.9 | 6.3 | 35.0 | L, L | % % | 28.7 | 53.2 | 35.7 | 55.4 | 22.5 | 1.2 | 1036.7 | |
| Waval Forces | 2168.8 | ኒያ | 10,01 | 00 | 13,7 | 00 | 35.5 6.1 | 25 0 1 | 200 190 190 190 | ທູ | 00 | 2450.7 | |
| ir Forces | 2223.4 5.11.3 | ຜູ | 20°8 | 5.5° 1.6° |))) | 16.6 2.6.6 | 122.9 | 80.8 | 397,7 | 28.0 | 7,5 | 5996.7 | |
| 10tal | 244181 | 7 | /87/ | | 7577 | 1 | | | | | | | |
| Found Forces | 748.9 | 9°,5 | 38.9 | 2°77 | 23.0 | 31.8 | 53.2 | 1. 1. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. | 4.89 | 22.6 | 7° 2 | 1084.1 | |
| vaval rolles Vir Forces | 3,000,3 | \ | , e. | 202 | 7,7 | 31,3 | 77,7 | 30,00 | 221,2 | 36,1 | 0 | 3611.0 | |
| Total | 6238,1 | 8, | 87.5 | 1100 | 39.2 | 63.1 | 164.5 | 100.5 | 519.9 | 9.49 | 7.07 | 7402.7 | |
| Jround Forces | 813.7 | 6,9 | 38.9 | ħ°24 | 25,1 | 32.9 | 55,1 | 15°2 | 78.0 | 27.3 | 4.8 | 1175.3 | |
| Naval Forces | 2677.7 | T.,5 | 10°3 | 0 | 29.3 | O | 35.6 | 25.5 | 202.2 | ֡֞֜֝֞֞֜֞֓֓֓֓֞֜֞֝֓֓֓֓֞֝֞֜֝֞֓֓֓֓֓֡ ֓֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֞֡ | Э (| 3040 | |
| Air Forces | 3591.8 7083.3 | دا م | ტ და და | 92°8 | 2 Y 구 4 | 14.17 | 97.55 5.55 | 38°50 70°57 | 219°6 359.8 | 中。 でご | 0 6 | 4168.7 8392.0 | |
| 55 | 7000 | | 200 | 70077 | | - | | | | | | | |
| Forces | 813.7 | 1°. | 37.6 | 52,2 | 29.5 | 35.2 | 57.0 | 16°5 | 100.6 | 32.6 | 6°9 | 1218.9 | |
| Naval Forces | 2934.8 | L.5 | ۲۰ ۲۰ | o (| ر د د د |) - - | 2,00 | 20°T | 7°762 | v. v. | 0 0 | 1,690 | |
| Air Forces Total | 7752°2 | η, 0°6 | \$ 2°±3° | 105°0 157°2 | 2°4 5°5 | 79°5 | 200°5 | 113.8 | 631.8 | 85°2 | 6°9 | 9194.4 | |
| | - Control of the Cont | Charles | - | Carried Section Control | | | CACCA-CA-CACCAC | | | | | | |

Quantities shown for USSR Ground Forces includes consumption by militarized security forces. Quantities shown for Air Forces includes consumption by Civil Aviation. See Appendices for quantities consumed by national forces outside national boundaries.

က်ီး ကို ပိ

| roes a | S-E-E-E-T | Table 2 | Estimated Annual Consumption of Petroleum Products Sino-Soviet Bloc Military Forces (Thousand Metric Tons) | Motor Jet Diesel Fuel Gasoline Fuel Oil Lubricants d/ | 277.4 | 0 1.0 | 0. 5.0 | 3.4 0 | 0 2. 0 | 31.11 0 25.3 5.8 3.9 | 0 52.2 37.9 | 0 [6,1] | 0 0 0 | 958.3 277.4 867.3 823.6 102.4 | | 552.4 818.8 | 0 1.0 | 1.1 3.4 7.6 | 3.0 3.4 0 | 0 4.6 0 | 17.3 0 1.4 0 1.0 | 4.5 25.7 0 | 71. 3 10.5 10.5 71.3 | Tool 6.00 2.11 | 0 0 | |
|---|-----------|---------|--|---|-------|-------|--------|-------|--------|----------------------|-------------|---------|-------|-------------------------------|---|-------------|-------|-------------|-----------|---------|------------------|------------|----------------------|----------------|-----|---|
| Consuming Fo USSE Albania Bulgaria Czechoslovakia East Germany Hungary Poland Rumania China North Korea North Kietnam Total USSE Albania Bulgaria Czechoslovakia East Germany Hungary Foland Rumania China Overth Korea North Korea North Korea North Korea | | | Estimated Annual Co Sino-Sovie (Thou | Aviation Gasoline b/ | | | | | | | | | | | - | | | 17.07 | 23.7 | | | | | | |) \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |

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| | | Estimated Annual Consumption of Petroleum Sino-Soviet Bloc Military Forces (Thousand Metric Tons) | al Consumption of Petz Soviet Bloc Military F (Thousand Metric Tons) | Annual Consumption of Petroleum Sino-Soviet Bloc Military Forces (Thousand Metric Tons) | m Products s | | | |
|--------|--|---|--|---|---|---|---|--|
| Year | Consuming Forces a/ | Aviation Gasoline b/ | Motor Gasoline | Jet Fuel c/ | Diesel Fuel | Fuel | Lubricants d/ | Total |
| 1952 | USSR Albania Bulgaria Czechoslovakia East Germany Hungary Poland Rumania China North Korea | 1142.0 14.7 21.8 0 11.1 10.3 47.9 0 | 788. 200. 375. 375. 77. 79. 19. 19. | 965.5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | 837.6 3.6 3.6 13.7 100.8 7.7 | 1306.5 0 7.6 0 0 10.8 23.8 83.7 | 100 4.50 14.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1 | 5141.1 8.2 71.9 76.1 22.2 46.6 1122.9 80.8 397.7 1.22 |
| r V | Total | 1268.5 | 1069.4 | 1102.8 | 1001.8 | 1432.4 | 121.8 | 5996.7 |
| 1953 | USSR Albania Bulgaria Czechoslovakia East Germany Hungary Poland Rumania China North Korea North Vietnam | 1216.9 .2 .2 .7.5 .25.6 11.8 .26.5 12.4 .53.2 .1.0 0 | 796 88 86.00 111 720 80 73.00 73.00 73.00 70 70 70 70 70 70 70 70 70 70 70 70 7 | 1763.4 0 17.7 h1.1 0 17.7 hh.2 16.3 157.3 33.9 0 | 871.2 1.0 3.7 1.0 1.5.4 1.0 26.6 1.0 7.0 0 | 1484-1 0 7.6 0 0 0 10.8 24.3 104.5 0 | 105.8 2.4 2.5 11.6 130.4 130.4 | 6238.1 8.5 87.5 1114.4 39.2 63.1 100.5 519.9 64.6 2.1 7402.7 |

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Table 2

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Page 3

| | Total | 7083 8 8 8 6 8 9 6 6 8 9 6 8 9 6 8 9 6 8 9 6 9 6 | 8392 0 92 2777 92 92 0 115774 113 8 8118 8618 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 |
|---|------------------------|--|--|
| | Lubricants d/ | 11 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 11 22 23 24 24 25 25 25 25 25 25 25 25 25 25 25 25 25 |
| | Fuel | 1650.7 0 7.6 0 0 0 10.8 24.3 117.2 | 1810.6 1719.1 0 7.5 0 0 0 0 114.6 214.8 0 0 |
| m Products s | Diesel Fuel | 29.7. 29.7. 29.7. 20.0. 27.0. 20.7. 10.7. 20.5. | 1233 |
| Annual Consumption of Petroleum Sino-Soviet Bloc Military Forces (Thousand Metric Tons) | Jet Fuel c/ | 2271.2 0 17.7 62.8 0 0 . 64.8 23.6 156.1 | 2661.1 2679.5 0 22.1 73.7 73.7 73.7 73.7 73.8 169.6 39.8 |
| al Consumption of Peta Soviet Bloc Military E (Thousand Metric Tons) | Motor Gasoline | 836 700 837 837 837 837 850 850 850 850 850 850 850 850 850 850 | 836.7 836.7 836.7 83.5 83.3 833.3 103.3 81.0 103.3 |
| Estimated Annual Consumption of Petroleum Sino-Soviet Bloc Military Forces (Thousand Metric Tons) | Aviation Gasoline $b/$ | 1194.3 194.3 194.1 265.1 126.1 126.6 52.2 4.3 | 1350.2 1199.9 19.1 12.9 13.2 13.2 55.6 6,0 0 |
| | Consuming Forces a/ | USSR Albania Bulgaria Czechoslovakia East Germany Hungary Poland Rumania China North Korea | Total USSR Albania Bulgaria Czechoslovakia East Germany Hungary Poland Rumania China North Korea |
| | Year | 1954 | 1955 |

Includes USSR and Communist China forces outside national boundaries. Reciprocating engine aircraft fuels, grades 100, 95, and less than 95, Jet engine aircraft fuels, grades T-l and 100 TS-l.
Lubricating oils, greases, etc.

က်ီး သို့ တို

<u>S-E-C-R-E-T</u>

Appendix A

GROUND FORCES*

1. Soviet and European Satellites.

A. Assumptions.

- (1) Soviet Army units were at authorized Table of Organization and Equipment (TO/E) strengths in tanks, self-propelled (SP) guns, and other vehicles during 1950-53.
- (2) Petroleum product consumption by Satellite army units is comparable to Soviet rates of consumption, except that units are at less than vehicle strengths authorized in TO/Es.
- (3) Petroleum products are consumed at the same rates by all vehicles of a particular type. For example, the consumption rate for the same truck used for transport is the same in all units.
- (4) All tractors in Soviet and Satellite units burn diesel fuel (although a few may burn gasoline).
- (5) The vehicle strength of the militarized security forces of the MVD was assumed. However, vehicle strength for Border Troops was estimated on the basis of available information.
- (6) All vehicles in the militarized security forces were considered as transport vehicles and were allocated gasoline for 7,200 miles of operation annually, except that 25 percent of the vehicles of the Interior Troops were assumed to be transport vehicles and the balance of the Interior Troops' vehicles were considered as other than transport and were allocated 2,100 miles of operation annually.
- (7) The relationship between petroleum products consumed by the Army forces and the schools supporting such forces is the same in all countries.

B. Methodology.

- (1) Estimates of petroleum product consumption by the Soviet Army have been divided into two periods: 1950-53 and 1954-55. In the first period, the organization of the Soviet forces was static, being based on the reorganization that took place in 1947. It is believed that annual petroleum product consumption during the period did not vary substantially during 1950-53. The second period takes into account the major organizational changes which began in 1954 and which increased substantially the number of wheeled and tracked vehicles. The petroleum product consumption during 1954-55 reflects only divisional changes there having been no evidence of non-divisional reorganization.
- (2) Annual gasoline consumption by the Soviet Army was calculated on the basis of the estimated total number of gasoline burning vehicles

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^{*} The estimates of consumption for Ground Forces represent the best available information as of December 1955.

in divisional and non-divisional units, military schools, and depot installations. In all instances, vehicles were divided into "transport" and "other" vehicles. "Transport" vehicles were allocated gasoline for 7,200 miles annually, and "other" vehicles were allocated 2,100 miles. Such mileages were obtained from current Soviet documents and reports.

(3) The fragmentary information available on Soviet tank and SP gun training indicates that most of the armor assigned to troops is kept in storage. Analysis of all available information led to the belief that about 10 percent of the armor in units was used throughout the year for training and that another 10 percent was added from the tank park during summer training in the field. The remaining 80 percent would therefore be used for short-term maneuvers and for movement to and from railroad stations. The following rates of operation were used:

10 percent, year-round training 400 hours

10 percent, summer training 50 hours

80 percent, maneuver training 25 hours

These rates were applied to the approximate 30,000 tanks and SP guns assigned to Soviet troops. No allowance was made for armor which was in permanent storage and, therefore, not assigned to troops. Fuel consumption for tractors and tank retrievers was calculated on the same basis as for tanks except that mileages were used instead of hours of operation. These vehicles were allotted fuel on the basis of 800 miles for 10 percent used in year-round training; 400 miles for an additional 10 percent used in summer training; and 200 miles for 80 percent used in maneuver training.

(4) Since the beginning of 1954, there has been substantial evidence of organizational changes in many Soviet Army units. The extent of these changes is, as yet, not completely known but the evidence is sufficient to warrant an increase in the annual consumption of petroleum products estimated for the period 1950-53. Based on the general indications noted to date, it is believed that the 1954-55 consumption may be developed by increasing the 1950-53 totals by the following quantities:

Gasoline 30,000 metric tons

Diesel Fuel 30,000 metric tons

Lubricants 4,800 metric tons

(5) Gasoline consumption by the Soviet militarized security forces of the MVD was calculated on the basis of 7,200 miles annually for "transport" vehicles and 2,100 miles for "other" vehicles. Gasoline consumption by the comparable troops in the Satellite countries was calculated on the basis of one truck per 20 men in the such security forces. Each truck was allocated 6,000 miles per year. Consumption for the different years was calculated on the basis of personnel strengths of the security forces of each country for each year. The Soviet militarized security forces were allocated 1,500 tons of diesel fuel annually on the basis of reported artillery and tanks in certain MVD units.

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- (6) Petroleum product consumption for the European Satellite armies was based on estimated vehicle strengths of each army. Vehicle strengths in Satellite units were estimated to be 85 percent of similar Soviet units in 1954. A calculation was made of the consumption in 1954 and percentage factors were applied to reflect the vehicle strength of Satellite armies for other years in order to develop consumption estimates for these years.
- (7) Available intelligence does not permit the development of estimates of petroleum products which may be consumed in space heating, lighting, cleaning, construction work by the military forces for the civil economy, or for other miscellaneous uses.

C. <u>Validity of the estimates</u>.

Since, it was necessary to use several estimated factors and assumptions, the estimates should be considered approximations and subject to considerable margin of error.

D. The estimates.

The consumption estimates for the Soviet and European Satellite ground forces are shown in Tables A-1, A-2, A-3, and A-4.

2. Communist China and the Asiatic Satellites.

A. Assumptions.

(1) Vehicle consumption per day in gallons is assumed as follows:

| | Trucks | Self Propelled Guns | Tanks |
|----------------------------|-------------------|------------------------|------------------------|
| North Korea | 4.2 3.6 (1955) | 6.9 | 8.4 |
| Communist Chinese in Korea | 4.2 3.6 (1955) | 6.9 | ે. 4 |
| Communist Chinese in China | 1.25 | 2.0 | 2.0 Heavy 1.0 Light |
| Viet Minh | 3.75 | , 4 | - |

Trucks operating in Korea are assumed to travel 1,000 miles per month (850 in 1955); in Communist China, 300; and in Viet Minh, 900. These consumption rates allow for a vehicle deadline factor of about one-third. Consumption rates are higher in Korea and North Viet Nam than in Communist China because of greater consumption during combat operations, and, since the armistice, by greater utilization of vehicles; vehicle operation in Communist China is believed to be sharply restricted.

B. Methodology.

The estimated number of vehicles for each year was based on an analyses of TO/E authorizations, reports of the numbers of vehicles on hand, and imports. The number of vehicles was multiplied by the daily

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consumption factor. The quantities so developed were multiplied by 365 to obtain a yearly figure.

C. Validity of the estimates.

The estimates of the numbers of vehicles used in the computation are fairly reliable, but the assumed consumption factors are subject to a considerable margin of error. However, the consumption factors do not seem inconsistent with available data on U.S. Army peacetime consumption in Korea which indicated an average of six gallons per vehicle per day. Nevertheless, the lack of information on actual consumption and the use of assumed consumption factors suggests a substantial margin of error.

D. The estimates.

The consumption estimates for Communist China and Asiatic Satellite ground forces are shown in Table A-5.

Table A-1

Estimated annual consumption of petroleum products Soviet Army (Metrić tons)

| Year | Location of units a/ | Motor gasoline | Diesel fuel | Lubricants | Total |
|-------------------------|---|----------------|-------------|-------------------|---------------------|
| 1950 h ro ugh | | | | | 1 |
| 1953 | USSR | 463,019 | 62,722 | 34,049 | 559,790 |
| | Austria | 7,034 | 952 | 81¢ , | 400,000 |
| | East Germany | 93,776 | 12,703 | 0,8% 0, | 115,272 27,2,211 |
| | Hungary | 5,861 | 762 | 431 703 | , c |
| | Poland | 8,205 | 21,1 | 503 703 703 | 9,920 |
| | Rumania | 8,205 | 21, | 3 | 7,9720 |
| | Tot:a1 | 586,100 | 79,395 | 43,100 | 708,595 |
| | 1330001 | • | • | | |
| 1954 | | | | | |
| hrough | ! | 76 | 06.1.30 | 37 862 | 611,003 |
| 1955 | USSR | 460, (19 | 344,00 | 300,10 | |
| | Austria | 7,394 | SIC. | 4,0 | מסאני, |
| | East Germany | 98,576 | 17,503 | 240°/ | 147, (21 |
| | Hungary | 6,161 | 1,094 | 9).7 | (,000 |
| | Poland | 8,625 | 1,532 | 699 | 10,826 |
| | Pumania | 8,625 | 1,532 | 699 | 10,826 |
| | A DESCRIPTION OF THE PROPERTY | | | | |
| | Total | 616,100 | 109,395 | 71,900 | 773,395 |
| | 1 | | • | | |

Geographical location of Soviet Army units.

S-E-C-R-E-TTable A-2

Page 1 of 1

Estimated Annual Consumption of Petroleum Products Soviet Army, 1950 through 1953 a/ (Metric Tons)

| | Transport | Motor (| Gasoline | | |
|--|---|--|---|---------------------------------|--|
| Line Divisions | Vehicles | Vehicles | Consumption b/ | Consumption c/ | Consumption Total |
| 105 Rifle 45 Mecz 20 Tank 5 Cavalry | 39.4% 32,445 309 34 % 19,485 433 37.4% 8,560 428 500 | 77،910 هر 77 61،170، 1366 22،580 هر 22 | 1799 48,715 | 62,330 49,175 18,065 0 | 143,440 97,890 39,465 1,250 |
| Sub-total | 60,990 | 161,960 | 152,475 | 129,570 | 282,045 |
| Non-Divisional Corps Troops Army Troops GHQ Troops Miscellaneous | 4,815 18,585 31,500 | 17,820 51,390 60,160 | 12,040 46,465 78,750 | 14,260 41,110 48,130 | 26,300 87,575 190,180 |
| Sub-total | 900وو54 | 129,370 | 255,255 | 103,500 | 63°,000 304°,055 |
| Total | 115,890 | 291,330 | 289 , 730 | 223,070 | 586,100 |
| Inne Divisions | Medium Tanks and SP Guns | Heavy Tanks and SP Guns | Fuel Tank Retrievers Tractors | | |
| 105 Rifle 45 Mecz 20 Tank | 7,140 10,215 5,460 | 0 2,925 1,300 | 2,940 1,485 700 | | 16,980 34,930 16,600 |
| Sub-total | 815و 22 | 4,225 | 5,125 | | 68,510 |
| Non-Divisional Corps Troops Army Troops GHQ Troops Sub-total Total | 210 500 1,475 2,185 25,000 | 0 790 400 1,190 5,415 | 1,080 1,650 1,520 4,250 9,375 | | 1,200 4,640 5,045 10 , 885 |
| | | Lubrica | - · | | 79 _s 395 |
| Lubricants for | gasoline engine driv | riven vehicles | = a/ | | 35,160 7,940 |
| Total | | | | | 43,100 |
| GRAND TOTAL | | | | | 708,595 |

The consumption for 1954 and 1955 is estimated on the basis of an increase of Gasoline 30,000 tons, Diesel fuel 30,000 tons, Lubricants 4,800 tons applied to the estimates for the years 1950 through 1955. (See paragraph 1, b, 4, Appendix A.) The consumption estimates for 1954 and 1955 are, therefore, gasoline 586,100 plus 30,000 or 616,100; diesel fuel 79,395 plus 30,000 or 109,395; lubricants 43,100 plus

11.

Calculated at 7,200 miles per vehicle per year. b.

Calculated at 2,100 miles per vehicle per year. đ.

Radar, motor boats, and outboard motors. Calculated at 6% of gasoline weight.

Calculated at 10% of diesel fuel weight.

Table A-3

Estimated annual consumption of petroleum products
Soviet Militarized Security Forces of the MVD

| | Total | 11,190 24,380 2,650 2,120 |
|---------------|----------------------------|--|
| | n Lubricants | 690 1,380 150 120 |
| | Consumption Diesel fuel | 1,500 |
| (Metric tons) | Motor gasoline | 23,000 23,000 2,500 2,000 |
| | Trucks | 3,500 20,000 1,000 800 25,300 |
| | Type of Unit | USSR Border troops Literior troops Convoy troops Signal troops |
| | Year 1950 | through 1955 U |

Table A-4

Page 1 of

Estimated annual consumption of petroleum products
European Satellite ground forces
(Metric tons)

180,210 149,425 6,060 31,050 34,670 7,710 18,110 48,310 34,300 Lubricants 8,580 7,980 Diesel fuel 8,205 89 3,230 3,200 810 810 2,460 1,130 10,470 900, 1, 610, 1 2,710 625 625 625 620 1,000 Motor gasoline 133,240 Location of Units Bulgaria Czechoslovakia East Germany Czechoslovakia East Germany Czechoslovakia East Germany Bulgaria Bulgaria Hungary Poland Bumania Hungary Poland Total 1 bania Hungary Poland Total Albania Rumania 1 bania 1952 Tear 1950

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| | Table A-4 | | P. | Page 2 of 2 |
|--------------------------------|---|-------------------------------|----------------|--|
| Estimate | Estimated annual consumption of petroleum products European Satellite ground forces (Metric tons) | etroleum products d forces | | |
| Location of Units | Motor gasoline | Diesel fuel | Lubricants | Total |
| Albania Bulgaria | 6,240 | 90 | 315 | 6,645 |
| Czechoslovakia East Germany | 38,430 | 3,670 | 2,110 1,005 | 44,210 12,410 13,010 10,010 10 |
| Hungary | 28,570 | 1,700 3,130 | 1,515 | 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 |
| Rumania | 40,535 | 1,410 | 2,145 | 727, 72, 14, 090, 44 |
| Total | 216,885 | 13,400 | 11,570 | 241,855 |
| Albania | 0,74,0 | 100 | 330 | 006°9 |
| czechoslovakia | 35,340 41,260 | 1,695 3,865 | 1,855 | 38,890 |
| East Germany | 22,160 | 1,785 | 1,18 | 41,550 25,135 |
| Poland | 29,580 49,190 | 1,785 | 1,565 | 32,930 |
| Rumania | 41,620 | 1,410 | 2,745 2,145 | 25,115 45,175 |
| Total | 225,620 | 13,940 | 11,935 | 251,495 |
| Albania | 6,685 | 105 | 340 | 7,130 |
| bulgaria Czechoslovakia | 34,070 | 1,695 | 1,790 | 37,555 |
| East Germany | 26,160 | 4,240 1,980 | 2,485 | 52,155 20,51.5 |
| Hungary Poland | 31,585 | 1,980 | 1,680 | 35,245 |
| Rumania | 42,745 | 5,470 1,485 | 2,715 2,310 | 57,040 46,540 |
| Total | 237,530 | 14,955 | 12,725 | 265,210 |
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| | Estimated annual | Table A=5 Estimated annual consumption of petroleum products | troleum products | Pag | Page 1 of 2 |
|----|--|---|----------------------------|-------------------------------|-------------------------------------|
| | Communist China | Communist China and Asiatic Satellite ground forces (Metric tons) | ite ground forces | | |
| ar | Location of units | Motor gasoline | Diesel fuel | Lubricants | Total |
| 20 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 12,525 6,475 13,000 0 | 620 0 1,800 | 655 325 750 0 | 13,800 6,800 15,550 |
| | Total | 32,000 | 2,420 | 1,730 | 36,150 |
| 15 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 21,5775 19,425 18,000 760 | 375 1,725 1,800 0 | 1,040 1,060 1,060 40 | 22,990 22,210 20,780 800 |
| | Total | 59,760 | 3,900 | 3,120 | 082,999 |
| 22 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 16,450 34,550 18,000 1,100 | 405 1,295 3,400 0 | 910 1,790 1,080 60 | 17,765 37,635 22,480 1,160 |
| | Total | 70,100 | 5,100 | 3,840 | 070°62 |

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Table A-5 Estimated annual consumption of petroleum products

Communist China and Asiatic Satellite ground forces (Metric tons)

| Year | Location of units | Motor gasoline | Diesel fuel | Lubricants | Total |
|------|--|-------------------------------------|------------------------------|--------------------------------|-------------------------------------|
| 1953 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 24,725 38,275 18,000 2,300 | 375 1,725 3,500 0 | 1,510 1,790 1,090 120 | 26,610 41,790 22,590 2,420 |
| | Total | 83,300 | 5,600 | 4,510 | 93,410 |
| 1954 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 24,470 47,530 23,000 4,600 | 575 1,725 3,000 0 | 1,700 2,000 1,300 230 | 26,745 51,255 27,300 4,830 |
| | Total | 009°66 | 5,300 | 5,230 | 110,130 |
| 1955 | Chinese Communist forces in China Chinese Communist forces in Korea North Korea North Vietnam | 41,435 49,565 28,000 6,600 | 1,665 3,135 3,000 0 | 2,165 2,635 1,600 330 | 45,265 55,335 32,600 6,930 |
| | Total | 125,600 | 7,800 | 6,730 | 140,130 |

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Appendix B

NAVAL FORCES*

1. Sino-Soviet Bloc Naval Forces.

A. Methodology.

These estimates, taken from ONI 18-1A (15 June 1955) and changes thereto, were developed by the following method:

- (1) Order of Battle was taken from Strength and Disposition of Foreign Navies (ONI-30-S/D) as revised for each year.
- (2) An operational schedule (number of days at sea, in port and in shippards) of each vessel type was developed on the basis of the best available intelligence, filled in and expanded by the use of USN experience.
- (3) Fuel consumption for each vessel type for each day at sea, in port and in yards was estimated on the basis of the most comparable USN type, modified as required.
- (4) The fuel consumed per vessel per year was estimated using data developed in steps 2 and 3 and multiplied by the number of vessels of that type on 1 July of each year to give annual consumption per type.
- (5) Annual consumption of all vessels in each type was totaled to give total consumption for the naval forces afloat.
- (6) Consumption of Naval Forces ashore is estimated on the basis of a per man requirement. The result is considered as all gasoline, although a small, probably insignificant, part of this total would be kerosene and diesel.
- (7) Requirements for lubricants are estimated at 1 percent for fuel oil data, 2 percent for deisel oil data and 5 percent for gasoline data.
- (8) These estimates include units attached to para-military organizations.

B. The estimates.

The consumption estimates for Bloc naval forces are shown in Tables B-1 and B-2.

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^{*} The estimates of consumption for Naval Forces represent the best available information as of November 1955. Naval Air Forces consumption is included with Air Forces in Appendix C.

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Table B-1

Page 1 of

Estimated annual consumption of petroleum products Soviet Bloc naval forces (Metric tons)

1,777,331 25,187 Lubricants ashore 3,925 3,932 3,832 3,832 Fuel oil 902,724 16,622 1,306,460 Diesel fuel 681,239 858 1,645 2,790 22,911 760,093 745,554 858 1,645 12,919 22,911 727,883 .858 1,645 6,796 22,911 Motor gasoline 10,667 72,818 61 230 122 684 692 74,607 ashore 72,818 61, 230 243 243 684 692 72,818 61 74,728 Location of Units Bulgaria East Germany East Germany East Germany Bulgaria Bulgaria USSR Albania 1bania Total Total USSR Albania Rumania Rumania Rumania Poland Poland | Poland Year 1950 1951 1952

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|------|--|--|--|---|---|---------------------------------------|--|--|
| | | | Tat | Table B-1 | | | | Page 2 of 2 |
| | μ | stimated anr | nual consum Soviet Bloc (Metr | Estimated annual consumption of petroleum products Soviet Bloc naval forces (Metric tons) | .eum products | | | |
| Year | Location of Units | Motor gas ashore | gasoline afloat | Diesel fuel afloat | Fuel oil afloat | Lubricants ashore | ants afloat | Total |
| 1953 | USSR Albania Bulgaria East Germany Poland Rumania | 72,818 61 1,37 851 867 692 | 13,015 531 551 551 0 228 190 | 778, 498 858 1,645 13,650 22,911 | 1,484,136 0 7,552 10,804 24,318 | 3,832 3 23 45 46 36 | 31,563 1,563 1,563 1,38 2,78 5,88 2,55 | 2,383,862 1,498 10,346 14,824 35,444 25,491 |
| | Total | 75,726 | 515,411 | 817,562 | 1,526,810 | 3,985 | 32,867 | 2,471,465 |
| 1954 | USSR Albania Bulgaria East Germany Poland Rumania | 79,857 61 61 137 851 867 692 | 15,276 531 531 551 0 228 190 | 891,960 858 1;645 27;811 23,053 | 1,650,682 0 7,552 10,804 24,318 | 11,203 3 23 145 146 36 | 35,680 1,5 1,38 568 591 255 | 2,677,658 1,1198 10,316 29,305 35,589 25,191 |
| | Total | 82,765 | 16,776 | 945,357 | 1,693,356 | 4,356 | 37,277 | 2,779,887 |
| 1955 | USSR Albania Bulgaria East Germany Poland Rumania | 80,273 61 637 910 1,112 | 17,337 531 551 551 0 228 190 | 1,074,673 858 1,645 32,034 23,197 | 1,719,122 7,552 14,598 24,789 | 1225 3 23 148 58 42 | 39,208 15 138 653 632 260 | 2,934;838 11,1498 10,346 33,645 39,825 26,082 |
| | Total | 83,594 | 18,837 | 1,132,407 | 1,766,061 | 4,399 | 40,936 | 3.046.234 |

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Table B-2
Estimated annual consumption of petroleum products
Communist China and Asiatic Satellite naval forces
(Metric tons)

| | | Motor gasoline | asoline | Diesel Fuel | The Land | 100 | 4 | |
|------|----------------------|----------------|------------|------------------|--------------|-----------|---------------|--------------------|
| Year | Location of Units | ashore | afloat | afloat | afloat | ashore af | ants | Total |
| 1950 | China North Korea | 728 582 | ដូដ | 51,545 4,292 | 37,869 0 | 825 | 1,440 | 91,757 |
| | Total | 1,310 | 251 | 55,837 | 37,869 | 69 | 1,533 | 96,869 |
| 1951 | China North Korea | 1,214 728 | 137 | 77,799 1,292 | 48,131 0 | 79 8£ | 2,080 93 | 129,425 |
| | Total . | 1,942 | 251 | 82,091 | 48,131 | 102 | 2,173 | 134,690 |
| 1952 | China North Korea | 1,455 | 703 411 | 101,979 4,292 | 83,688 0 | ጛር | . 2,963 93 | 190;833 5,521 |
| | Total | 2,426 | 817 | 106,271 | 83,688 | % | 3,056 | 196,354 |
| 1953 | China North Korea | 1,699 1,214 | 760 228 | 119,678 | 104,502 0 | 88 79 | 3,537 | 230,265 |
| | Total | 2,913 | 988 | 123,970 | 104,502 | 153 | 3,636 | 236,162 |
| 1954 | China North Korea | 1,942 1,214 | 950 228 | 137,963 4,292 | 117,159 | 102 64 | 4,048 | 262,164 5,897 |
| | Total | 3,156 | 1,178 | 142,255 | 117,159 | 166 | 741,4 | 268,061 |
| 1955 | China North Korea | 2,185 1,214 | 1,064 | 149,758 4,292 | 136,817 | 115 | 4,494 | 294; 433 5, 897 |
| | Total | 3,399 | 1,292 | 154,050 | 136,817 | 179 | 4,593 | 300,330 |

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Appendix C

AIR FORCES*

1. Sino-Soviet Bloc Air Forces.

A. Assumptions and methodology.

(1) Aircraft fuels and lubricants.

- (a) Aircraft in operating regiments The air order of battle for aircraft of each Satellite country, Soviet forces in each Satellite country, and the USSR, for the years 1950-1955, was established. Since Soviet aircraft strengths are normally stated as TO/E strengths, the percentage of TO/E for each type regiment, was used to determine actual aircraft strength. Flying time per aircraft was based on the estimated pilot time per year for each type regiment. A factor for the ratio of aircraft to pilots was determined in order to get actual aircraft times per year. A handling factor loss of 3.04 percent for aviation fuel, and 3.57 percent for aviation lubricating oil was used. Oil consumption factors used are 1.62 percent of fuel consumed for piston engines, and 1.63 percent of fuel consumed for jet engines.
- (b) Aircraft in training establishments Aircraft assigned to the military training establishment and para-military organizations were determined for each year. Flying hours per aircraft in these training schools, as estimated in AIS 2-18, "The Logistical System of Soviet Military Aviation, USSR," were used in determining the consumption for all training aircraft.
- (c) Aircraft in civil aviation -- Civil aircraft include those assigned Civil Air Fleet, Polar Aviation, the Ministries of Aviation Industry and Internal Affairs; and civil training schools. Monthly flying hours for aircraft in the Civil Air Fleet, as shown in AIS 2-6, "Soviet Bloc Civil Aviation," were used to determine consumption.
- (d) Aircraft testing -- A time factor for engine run-in and aviation industry testing, prior to turning aircraft over to the military, was established. The time factor was based primarily on US factors, and on limited intelligence of Soviet practices.

(2) Diesel fuel and motor gasoline.

(a) Vehicle equipment assigned to aircraft regiments as listed in AIS 2-18, was used to determine motor gas and diesel fuel consumption. Assumptions were based on an estimated number of miles per day that each vehicle would travel. An estimate was made for the petroleum products consumed by the motor vehicles assigned to the training schools.

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^{*} The estimates of consumption for Air Forces represent the best available information as of June 1955.

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(3) Kerosene and fuel oil.

(a) The requirements for heating and lighting are considered to be insignificant in comparison to other petroleum product requirements. No estimates have been made for kerosene and fuel oil used for this purpose.

B. The estimates.

The consumption estimates for Bloc Air Forces including Naval Air Forces are shown in Tables C-1, C-2, and C-3.

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|--|-----------------------|----------------------------|---|-----------------------|-----------------|----------------|----------------------|----------------------------------|
| | | | Table C-1 | | | | Page 1 of 12 Pages | 12 Pages |
| | Estimated Annu | al Consumpti | Annual Consumption of Petroleum Products Soviet Air Forces 1950 (Metric Tons) | um Products s) | Soviet Air E | orces | | |
| | | Aviation Gasoline | ine Less than | , | Motor | , d | - | - - - - |
| Location of Units | Grade 100 | Grade 95 | Grade 95 | det Fuel | Gasoline | Dieser Fuel | Lubricants | TOTAL |
| USSR Soviet Air Force Soviet Naval Aviation | 22,805 | 251,154 76,233 | 00 | 100,670 | 41,467 8,368 | 6,972 1,407 | 5,721 | 428,789 87,549 |
| Training Civil Aviation MAP Aircraft (testing) | 23,694 0 15,998 | 91,545 102,073 1,550 | 29,122 293,721 699 | 52,733 0 92,768 | ης), 6 | , | 654. 744. 644. | 102; 241 102; 241 111, 164 |
| rotal | 62,497 | 522,555 | 323,542 | 246,171 | 69,629 | 8,379 | 16,596 | 1,249,369 |
| Austria Soviet Air Force | 0 | 11,355 | 0 | 0 | 1,249 | 210 | 230 | 13,044 |
| East Germany Soviet Air Force Soviet Naval Aviation | 00 | 17,214 539 | 00 | 29,534 | 4,371 125 | 735 | 101 11 | 52,255 696 |
| Total | 0 | 17,753 | 0 | 29,534 | 964,4 | 952 | 715 | 52,951 |
| Hungary Soviet Air Force | 0 | 1,078 | 0 | 0 | 249 | 775 | 22 | 1,391 |
| Poland Soviet Air Force Soviet Naval Aviation | 00 | 14, 80h | 00 | 1,688 | 1,124,250 | 189 142 | 100 19 | 7,905 |
| Total | 0 | 5,762 | 0 | 1,688 | 1,374 | 231 | 119 | 9,174 |
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| | | | Table C-1 | 1 | | | Page 2 o | Page 2 of 12 Pages | |
| | Estimated Ann | ual Consumpti | Annual Consumption of Petroleum Products Soviet Air Forces 1950' (Metric Tons) | um Products 1s) | Soviet Air I | orces | | | |
| | Av | Aviation Gasoline | ne | | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total | |
| Rumania | | | | | | | | | |
| Soviet Air Force | 0 | 3,839 | 0 | 0 | 625 | 105 | 78 | 749,4 | |
| China | | | | | | | | | |
| Soviet Air Force | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Total Soviet Units Outside USSR | 0 | 39,787 | 0 | 31,222 | 7,993 | 1,344 | 861 | 81,207 | |
| Total Soviet Air Forces | 62,497 | 562,342 | 323,542 | 277,393 | 77,622 | 9,723 | 17,457 | 1,330,576 | |

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|---|----------------|-------------------|--|------------------|--------------------------|-------------|---|-------------------------------|
| | | | Table C-1 | | | | Page 3 of 12 Pages | 12 Pages |
| | Estimated Annu | al Consumpti | Annual Consumption of Petroleum Products Soviet Air Force 1951 (Metric Tons) | um Products | Soviet Air B | force | | |
| | Avi | Aviation Gasoline | De | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Га‡оп |
| USSR | | | | | | | | |
| Soviet Air Force | 89,592 | 262,256 | : | 199,658 | 42,715 | 7,182 | 7:477 | 608,880 |
| Training | 23,69 <u>4</u> | 87,276 87,486 | 30 ,12 6 | 5,907 118,234 | 8,743 18 ,16 7 | 1,1,70 | 1,693 | 101,089 |
| CIVIL AVIATION MAP Aircraft (testing) | η69°91 | 102;172 1,702 | 293,953 1,042 | 0 0,641 | 00 | 00 | 6,1,5,2 6,1,5,3 6,5,3,4,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5 | 402,578 402,578 169,922 |
| Total | 129,980 | 536,892 | 325,121 | 473,720 | 69,625 | 8,652 | 18,682 | 1,562,672 |
| Austria | | | v _e v. | | | | \ | |
| Soviet Air Force | 0 | 13,326 | 0 | 0 | 1,249 | 210 | 569 | 15.051 |
| East Germany | | | | | | | | |
| Soviet Air Force Soviet Naval Aviation | 00 | 36,41 | 00 | 68,603 | 4,371 125 | 735 21 | 11. ⁴ 5 | 88;256 3,10h |
| Total | 0 | 14,136 | 0 | 71,556 | 964,4 | 756 | 914 | 91,360 |
| Hungary | | | | | | | | |
| Soviet Air Force | O | 1,348 | • 0 | 0 | 642 | 24 | 27 | 1,666 |

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| | | | Table C-1 | | | | Page 4 o | Page 4 of 12 Pages |
| | Estimated Annu | Annual Consumption of Petroleum Products Soviet Air Forces 1951 (Metric Tons) | n of Petroleum 1951 (Metric Tons) | um Products s) | Soviet Air F | orces | | : ' |
| | Avi | Aviation Gasoline | • | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Poland | | , | | , | ٠ | | | ` |
| Soviet Air Force Soviet Naval Aviation | 00 | 4,980 1,198 | 00 | 4,219 0 | 1,124,250 | 189 42 | 108 24 | 10,620 |
| Total | 0 | 6,178 | 0 | 4,219 | 1,374 | 231 | 132 | 12,134 |
| Rumania | | , | 1 | | | | | ` |
| Soviet Air Force | 0 | 3,722 | 0 | 2,953 | 625 | 105 | 80 | 7,485 |
| China | | | | | | 3 | 3 | |
| Soviet Air Force | 0 | | 0 | 0 | 0 | 0, | 0 | 0 |
| Total Soviet Units Outside USSR | 0 | 38,710 | 0 | 78,728 | 7,993 | 17,344 | 428 | 127,699 |
| Total Soviet Air Forces | 129,980 | 575,602 | 325, 121 | 552,1418 | 77,618 | 966.6 | 19,606 | 1,690,371 |
| | | | Z | | | | | |

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| | | | Table C-1 | | | | Page 5 of] | 12 Pages |
| | Estimated Annual Consumption of Petroleum Products Soviet Air Forces 1952 (Metric Tons) | ual Consumptic | on of Petroleum 1952 (Metric Tons) | um Products s) | Soviet Air F | orces | | |
| | Avi | Aviation Gasoline | je 1 | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| USSR | ¥ | , | | , | | | | |
| Soviet Air Force Soviet Naval Aviation | 165,208 | 310,215 | 00 | 319,464 | 46,088 | 947 ° 7 | 10,190 | 858,914 |
| Training Civil Aviation | 23,694 | 83,393 150,000 150,000 | 26,557 | 185,400 | 15,952 | 75) ⁶ T | 2,500 2,181 2,000 | 337,477 |
| MAP Aircraft (testing) | 16,425 | 1,672 | 1,002 | 150,613 | | 00 | 9,50, 558 | 410,977 170,270 |
| Total | 205,327 | 570,607 | 329,678 | 760,217 | 72,282 | 9,471 | 21,483 | 1,969,065 |
| Austria | | | * | , | | | | |
| Soviet Air Force | .0 | 8,405 | ි ව : | 14,050 | 1,124 | 189 | 196 | 23,964 |
| East Germany | | | | | , | | | |
| Soviet Air Force Soviet Naval Aviation | 00 | 13,309 | (OO) | 104,549 3,544 | 4,371 125 | 735 | 9 9 17 | 123,424 3,696 |
| Total | 0 1 | 13,309 | • · · · · · · · · · · · · · · · · · · · | 108,093 | 967,4 | 756 | 9917 | 127,120 |
| Hungary | | ` | | , | | | | |
| Soviet Air Force | 0 | 1,610 | o : | 14,385 | 625 | 105 | 59 | 16,784 |
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| | | | Table C-1 | | | | Page 6 of 12 Pages | L2 Pages |
| | Estimated Annua | al Consumptic | on of Petroleum 1952 (Metric Tons) | um Products (s) | Annual Consumption of Petroleum Products Soviet Air Forces 1952 (Metric Tons) | Seo | | |
| | ΑV | Aviation Gasoline | ne | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fiel | Lubri cente | |
| Poland | | | | | | 100 | Tank Todillo | |
| Soviet Air Force Soviet Naval Aviation | | 4,895 1,437 | 00 | 7,595 | 1,124 | 189 12 | 112 | 13,915 75,6 |
| Total | : | 6,332 | 9 | 7,595 | 1,374 | 231 |) [| 15,673 |
| Rumania | ÷ | | | | • | | † | <u>}</u> |
| Soviet Air Force | 0 | 2,774 | 0 | 10,506 | 625 | 105 | 7 4 | י, ור |
| China | | | | , | |) | 2 | 000 % |
| Soviet Air Force | 0 | 3,993 | 0 | 50,630 | 1,624 | 273 | 173 | 56,693 |
| Total Soviet Units Outside USSR | 0 | 36,423 | 0 | 205,259 | 9,868 | 1,659 | 1,110 | 25/10,319 |
| Total Soviet Air Forces | 205,327 | 607,030 | 329,678 | 965,476 | 82,150 | 11,130 | 22,593 | 2,223,38h |

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|---|--------------------------------------|-------------------|--|--|-------------------|-------------|----------------|--------------------|
| | Estimated Annual Consumption of (Met | al Consumpti | on of Petroleur 1953 (Metric Tons) | Petroleum Products Soviet Air Forces 1953 cric Tons) | Soviet Air F | orces | | |
| | Āvi | Aviation Gasoline | ge Ge | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | π Le‡o# |
| SSR | | | | | | | | T-00-04 |
| Soviet Air Force | 183,746 | 245,283 | 0 | 815,962 | 191,84 | 8,11,8 | 10,161 | 1,311,761 |
| Doviet mayar Aviation Training | 0 41,465 | 56,946 140,021 | 0 10,995 | 237;275 291,422 | 11,616 17,958 | 1,953 | 1,583 1,102 | 309,373 |
| Civil Aviation MAP Aircraft (testing) | 156°1 | 394, 203 345 | 75 <u>,</u> 391 1,070 | 0 161,760 | 80 ` | 000 | 7,649 368 | 177,243 168,494 |
| Total | 230,162 | 836, 798 | 117,456 | 1,506,419 | 78,035 | 10,101 | 23,863 | 2,802,834 |
| ustria | | | | | | | | |
| Soviet Air Force | 0 | 999 | 0 | 23,627 | 6712 | 126 | 35 | 25,224 |
| ast Germany | | | | | | | | |
| Soviet Air Force Soviet Naval Aviation | 00 | 10,894 | 00 | 120,078 4,430 | 4,496 125 | 756 12 | 439 8 | 136,663 4,584 |
| Total | 0 | 10,894 | 0 | 124,508 | 4,621 | 777 | 744 | 742, 141 |
| mgary | | , | | | | | | |
| Soviet Air Force | 0 | 7,510 | 0 | 21,133 | 1,124 | 189 | 190 | 30,146 |
| | | | | | | | | |

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| | | | アーガーン・ガーウ | <u>.</u> | | | | |
|---|---------------|-------------------|--|---|-------------------|-------------|------------|-----------------|
| | | | Table C-1 | r d | | | Page 8 of | 8 of 12 Pages |
| | Estimated Ann | aal Consumpti. | on of Petroleum 1953 (Metric Tons) | Annual Consumption of Petroleum Products Soviet Air Forces 1953 (Metric Tons) | Soviet Air F | orces | | |
| | Av | Aviation Gasoline | ne | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Poland | | , | | | | | | |
| Soviet Air Force Soviet Naval Aviation | 00 | 4,256 1,677 | 00 | ν. 11, 814 Ο | 999 250 | 168 12 | 107 34 | 17;344 2,003 |
| Total | 0 | 5,933 | 0 | 11,814 | 1,249 | 210 | 대 | 19,347 |
| Rumania | | , | | | | | | |
| Soviet Air Force | 0 | 2,982 | 0 | 13,143 | † 729 | 105 | 85 | 16,939 |
| China | | | | | | | | |
| Soviet Air Force | 0 | 4,412 | 0 | 62,760 | 1,874 | 315 | 204 | 595,69 |
| Total Soviet Units Outside USSR | 0 | 32,397 | 0 | 256,985 | 10,241 | 1,722 | 1,123 | 302,168 |
| Total Soviet Air Forces | 230,162 | 869,195 | 117,456 | 1,763,404 | 88,276 | 11,823 | 24,986 | 3,105,302 |

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|---|--|---|---|---|---------------------------------|--------------------------|--|---|
| | | | Table C-1 | | | | Page 9 of 12 Pages | 1868 |
| | Estimated Annual Consumption of Petroleum Products Soviet Air Forces 1954 (Metric Tons) | al Consumptic | n of Petroleum 1954 (Metric Tons) | um Products S s) | oviet Air F | orces | | · |
| | Av | Aviation Gasoline | пе | | | | | |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| USSR | | | | | | , | | |
| Soviet Air Force Soviet Naval Aviation Training Civil Aviation MAP Aircraft (testing) | 224,795 0 59,23 4 0 | 176,380 36,916 144,522 404,852 | 0 0 142,803 75,391 1,158 | 1,254,241 345,705 291,422 0 166,492 | 51,958 11,990 16,139 0 | 8;736 2,016 0 0 | 10,396 1,375 1,194 1,823 7,823 | 1,726,506 398;002 558;614 488;066 167,942 |
| Total | 284,029 | 762,670 | 119,352 | 2,057,860 | 80,087 | 10,752 | 24,380 | 3,339,130 |
| Austria | | | | | | | | • |
| Soviet Air Force | 0 | 462 | 0 | 23,627 | 47 | 126 | 59 | 25,360 |
| East Germany | | ` | | ` | , | | | ` |
| Soviet Air Force Soviet Naval Aviation | 00 | بلبلا _{، د} دد 0 | , 0 0 | 81;219 4,430 | 3,622 | 609 | 379 8 | 97; 273 4,584 |
| Total | 0 | गगः | 0 | 85,649 | 3,747 | 630 | 387 | 101,857 |
| Hungary | | | | | | | | |
| Soviet Air Force | 0 | 0 | 0 | 31,744 | 449 | 126 | 28 | 32,677 |
| | | | | | | | | |
| | | | 31. | | | | | |
| | | | | | | | | |

| S-E-C-R-E-T | |
|--|---------------------|
| Table C-1 | Page 10 of 12 Pages |
| Estimated Annual Consumption of Petroleum Products Soviet Air Forces | |

| | | | Table C-1 | - | | | Page 10 of 12 Pages | L2 Pages |
|---|---|-------------------|--|---------------------|-------------------|-------------|---------------------|-----------|
| | Estimated Annual Consumption of Petroleum Products Soviet Air Forces 1954 (Metric Tons) | al Consumpti | on of Petroleum 1954 (Metric Tons) | eum Products ns) | Soviet Air F | orces | | |
| | Avi | Aviation Gasoline | ne Te | | | | | • |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Poland | | ٠ | | , | | | | , |
| Soviet Air Force Soviet Naval Aviation | 0 0 | 3,354 | 9 9 | 23,728 | 1,124,250 | 189 42 | Ηĸ | 28,506 |
| Total | 0 | 5,031 | 6 | 23,728 | 1,374 | 231 | गिरा | 30,508 |
| Rumania | 7 | , | | , | | | | , |
| Soviet Air Force | : | 3,398 | 0 | 13,143 | 625 | 105 | 93 | 17,364 |
| China | | , | | ` | | | | |
| Soviet Air Force | 0 | 1,607 | 0 | 35,441 | 1,374 | 231 | 218 | 178,44 |
| Total Soviet Units Outside USSR | 0 | 28,279 | 0 | 213,332 | 8,618 | 2,149 | 959 | 252,637 |
| Total Soviet Air Forces | 284,029 | 790,949 | 119,352 | 2,271,192 | 88,705 | 12,201 | 25,339 | 3,591,767 |

| C-R-E-T | |
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| | | | Table C-1 | | | | Page 11 of 12 Pages | 2 Pages |
|--|-----------------|--------------------|--|---|-------------------|----------------|-----------------------|----------------------------------|
| | Estimated Annu | al Consumptio | on of Petroleur 1955 (Metric Tons) | Annual Consumption of Petroleum Products Soviet Air Forces 1955 (Metric Tons) | oviet Air F | orces | | |
| | Avi | Aviation Gasoline | Je | | | | | • |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| USSR | , | , | | , | , | | | * |
| Soviet Air Force Soviet Naval Aviation | 200,361 | 151,379 | (1 | 1,479,897 | 50;335 12;864 | 8,463 2,163 | 9,812 | 1,900,247 |
| Training Civil Aviation WAP Aimeneft (testing) | 77,005 8,872 | 158,100 434,279 | 18,828 79,358 1,006 | 291,422 | 15,534 0 0 | 000 | 5,103 8,533 387 | 595, 992 544, 359 227, 364 |
| Total | 286,238 | 768,220 | 129,192 | 2,448,137 | 78,733 | 10,626 | 25,127 | 3,746,273 |
| Austria | | | Di vi | , | | | | |
| Soviet Air Force | • | 199 | - O | 23,627 | 447 | 126 | 59 | 25,360 |
| East Germany | | | | • | , | | | i |
| Soviet Air Force Soviet Naval Aviation | 00 | 9,749 0 | | 132,429 4,578 | μ,372 125 | 735 21 | 439 8 | 147,724 4,732 |
| Total | 0 : | 9,749 | 0 | 137,007 | 16,497 | 756 | 744 | 152,456 |
| Hungary | | | | , | | | | x. |
| Soviet Air Force | 0 | 0 | 0 | 31,744 | 47 | 126 | 28 | 32,677 |

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| Page 12 of 12 Pages | | Diesel Fuel Lubricants Total | 189 113 29;874 12 34 2,003 231 147 31,877 | 63 40 15,078 | 0 0 0 0 0 0.302.302.302.302.302.302.303,721 | |
|--------------------------|--|---|---|-----------------------------|--|-----|
| | Soviet Air Forces | Motor Gasoline Diesel | 1,124 18 250 1 | 375 | 0 0 7,744 86,477 11,928 | |
| S-E-C-R-E-T Table C-1 | n of Petroleum Products 1955 (Metric tons) | e Less than Grade 95 Jet Fuel | 0 25,094 0 0 0 | 0 13,881 | 0 0 0 231,353 0 2,679,490 | |
| | Estimated Annual Consumption of Petroleum Products Soviet Air Forces 1955 (Metric tons) | Aviation Gasoline Grade 100 Grade 95 | 0 3,354 0 1,677 0 5,031 | 0 719 | 0 0 16,298 286,238 784,518 | e e |
| | B61 | Location of Units | Poland Soviet Air Force Soviet Naval Aviation Total | Rumania Soviet Air Force | China Soviet Air Force Total Soviet Units Outside USSR Total Soviet Air Forces | |

| | | ESTIMATED ANNUAL EUROPEAN | ED ANNUAL CONSUMPTION OF EUROPEAN SATELLITE AIR F | | F PETROLEUM PRODUCTS FORCES = 1950 | Page | ge 1 of 6 Pages | |
|--|-----------|------------------------------------|---|----------|---------------------------------------|-------------------------------------|----------------------------------|---|
| | Avie | Aviation Gasoline | | | | | Met | Metric Tons |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Tota1 |
| Albania Air Force | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bulgaria Air Force Training Civil Aviation Total | 0000 | 2393 1873 571 4837 | 426 1334 1760 | 000 | 375 345 0 720 | 63 | 49 37 31 117 | 2880 2681 1936 7497 |
| Czechoslovakia Air Force Training Civil Aviation MAP Airoraft (testing) Total | 00000 | 6627 2095 2920 0 11642 | 0 1370 6814 0 8184 | 0000 | 999 502 0 0 1501 | 168 0 0 0 0 168 | 133 56 157 0 346 | 7927 4023 9891 0 |
| East Germany Air Force | . 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hungary Air Force Training Civil Aviation Total | 0000 | 750 1098 635 2483 | 0 1343 1481 2824 | 0000 | 250 366 0 616 | 24 0 0 24 24 | 15 40 34 89 | 1057 2847 2150 6054 |
| Poland Air Force Naval Aviation Training Civil Aviation WAP Aircraft (testing) Total | 00000 | 6065 0 2346 1270 0 | 2107 2963 2963 0 | 00000 | 1124 0 670 0 0 | 189 0 0 0 0 0 189 | 122 0 72 69 0 263 | 7500 0 5195 4302 0 16997 |
| Rumania Air Force Training Çivil Aviation Total | 0000 | 6540 1397 1397 9334 | 0 702 3259 3961 | 0000 | 874 273 0 1147 | 147 0 0 0 | 132 33 76 241 | 7693 2405 4732 14830 |
| Total European Satellites | 0 | 37977 | 21799 | 0 م | 5778 | 609 | 1056 | 67219 |

| 9 9 9 9 | | | | ° C\$ | | | | |
|-------------------------------------|---------------|---------------------------|-----------------------|---|-------------------|-------------|-------------------|---|
| | | ESTIMATED ANNUAL EUROPEAN | | CONSUMPTION OF PETROLEUM FRODUCTS SATELLITE AIR FORCES - 1951 | 1951 | E. | Page 2 of 6 Pages | |
| | Avie | Aviation Gasoline | ine | | | | Ne. | Metric Tons d |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Albania Air Force | O ° | 0 | 0 | 0 | 0 | 0 | 0 | ed Fo |
| Bulgaria Air Force | 00 | 12151 | 0 2 | 1055 | 1499 | 252 | 247 | or Rel |
| fraining Civil Aviation Total | 000 | 699 15661 | 453 1630 2083 | 1055 | 392. 0 1891 | 252 | 55 37 337 | ease 5366 2366 21279 |
| Czechoslovakia Air Force | 0 | 10530 | | 2953 | 1499 | 252 | 218 | 15452 15452 |
| Training Civil Aviation | 0 0 | 1987 | 1416 | 00 | 480 | 00 | 55 | 3938 3938 3939 |
| MAP Aircraft (testing) | 0 | 0 | 0 | 0 0 | o 0 | 0 | 0 | |
| Tota1 | 0 | 15437 | 8230 | 2953 | 1979 | 252 | 430 | . 18262 O |
| East Germany Air Force | 0 | | 0 | 0 | 0 | 0 | 0, | O O |
| Hungary Air Force | 0 | 5250 | . 0 | 0 | 874 | 147 | 107 | |
| Training | 0 (| 1287 | 1377 | 0 0 | 400 | 00 | 43 | 3107 |
| Total | | 7172 | 2858 | 0 | 1274 | 147 | 184 | 110 92911 |
| Poland Air Force | 0 (| 12176 | 00 | 4325 | 1998 | 336 | 253 | 00A00 |
| Mayal Aylatlon Training | > 0 | 283 | 2445 | ၁င | 130 788 | 7.7 | % % | 456 95.5 95.5 95.5 95.5 95.5 95.5 95.5 95 |
| Givil Aviation | 000 | 1270 | 2963 | | 900 | 000 | 99 | |
| mar arierate (testing) Total | 00 | 16556 | 5408 | 4325 | 2916 | 357 | 413 | 28875 |
| Rumania Air Force | 0 | 8306 | 0 | 1582 | 1124 | 189 | 170 | 01-1 |
| Training Civil Aviation | 00 | 1397 1397 | 722 3259 | 00 | 275 0 | 00 | 34 76 | 2428 4732 |
| Total | 0 | 11100 | 3981 | 1582 | 1399 | 189 | 280 | 18531 |
| Total European Satellites | 0 | 65926 | 22560 | 9915 | 9459 | 1197 | 1644 | 110701 |
| | | | | 36. | | | w.l | S-E-C-R-E-T |

| Approved For Release 2000/08/29: | CIA-RDP79S01100A000200160001-1 |
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| | | ESTIMATED ANNUAL | | S-E-C-R-E-T Table C-2 CONSUMPTION OF PETROI | PETROLEUM PRO DUCTS | Pag | Page 3 of 6 Pages | |
|---|------------|-------------------|-----------------------|---|---------------------|-------------|-------------------|-------------|
| | ! | BUR | EUROPEAN SATELLIT | | - 1952 | | | |
| | Avi | Aviation Gasoline | | | | | Met | Metric Tons |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Albania Air Force | 0 | 180 | 0 | 0 | 0 | 0 | 4 | 184 |
| Bulgaria Air Force | 0 | 8570 | a | 8860 | 2123 | 357 | 189 | 66008 |
| Training | 0 | 2811 | 621 | 0 | 419 | 0 | 22 | 3906 |
| Givil Aviation Potal | 000 | 825 12206 | 1925 | 0 | 9542 | 257 | 45 | 2795 |
| 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | > | 14400 | 0#67 | 0000 | 9 1 000 |) GC | 203 | 00000 |
| Czechoslovakia Air Force | 00 | 8629 | 0 | 10126 | 1499 | 252 | 261 | 20698 |
| iraling |) (| 2832 | 2.140 | ၁ (| 409 | 0 (| 82 | 5526 |
| GIVIL AVIATION MAP Aircraft (testing) | - 0 | 2412 | 6299 | 0 491 | 00 | 00 | 131 3 | 8172 |
| Total | 0 | 14077 | 7769 | 10617 | 1908 | 252 | 408 | 35031 |
| East Germany Air Force | 0 | 0 | 0 | 0 | 0 | 0 | O. | 0 |
| Hungary | | ! | | | | | | |
| Air Force | 0 (| 5643 | 0 | 5063 | 666 | 168 | 124 | 11997 |
| Training Cirti Aristica | 0 | 7.7.36 3.7.7 | 1554 | o (| 302 | 0 0 | 4. 5 | 3706 |
| TOTOTAL TIVE | | 000 | TOAT | 0 | | 0 8 8 | 5 | OCTY |
| | 5 | #/O0 | ဇဂဂ္ဂဇ | ဇရဂဇ | TOST | 897 | \$ T¢ | 1/855 |
| Poland Air Force | c | 7667 | C | 10128 | 1998 | 222 | 177 | 00206 |
| Neval Aviation | 0 | 359 | 0 | 0 | 125 | 21 | | 512 |
| Training | 0 | 5224 | 3061 | 0 | 828 | 0 | 134 | 9248 |
| iatio | 0 | 1270 | 2963 | 0 | 0 | 0 | 69 | 4302 |
| MAP Airoraft (testing) | 0 | 0 | 0 | 70 | 0 | 0 | 0 | 70 |
| | 0 | 14520 | 6024 | 10196 | 2952 | 357 | 383 | 34432 |
| Runania | | 1. | | | | | | |
| Air Force | 0 (| 4640 | 0 0 | 7595 | 1499 | 252 | 106 | 14092 |
| fraining Civil Aviation | 00 | 3174 | 70 11 | 00 | 9.42 0 | 00 | 4 C | 3226 |
| Total | 0 | 9211 | 1102 | 7595 | 1748 | 252 | 199 | 20102 |
| Total European Satellites | 0 | 56046 | 22698 | 42331 | 10451 | 1386 | 1495 | 134407 |
| | | | | | | | | : |

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Table C-2

ESTIMATED ANNUAL CONSUMPTION OF PETROLEUM PRODUCTS

EUROPEAN SATELLITE AIR FORCES - 1953

| | Avîe | Aviation Gasoline | -ue | | | | ; | |
|--|--------------|-------------------|---------------|------------|----------------|---------------|------------|-------------|
| Location of Thits | 000000 | | I ⊶ | | | | Met | Metric Tons |
| Alberte | arade TOO | urade 95 | Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| Air Force | 0 | 210 | . · | c | 100 | Č | | |
| Bulgaria | | | | • | 9 | 12 | 4 | 360 |
| Air Force | 0 | 11175 | c. | 19991 | 000 | | • | |
| Training | 0 | 3278 | 900 | 1 0 | 7338 | 336 | 257 | 31487 |
| Givil Aviation | 0 | 9126 | 900 | o (| 46.2 | 0 | 2 | 4627 |
| Total | | 0000 | | ٥ | 0 | 0 | 34 | 2150 |
| | > | SOCOT | 985 | 17721 | 2292 | 336 | 361 | 7826A |
| Czechoslovakia | | 1 | | | | | 4 | # 0300 |
| Air Force | C | 0260 | c | , | | | | |
| Training | o c | 9700 | 0 :00 | 31011 | 2248 | 378 | 254 | 43659 |
| Civil Aviation | o c | # CO | 1962 | 0 | 333 | . 0 | 108 | 2002 |
| Mary discount of the contract of |)) | 804 I | 0 | 0 | 0 | c | רצו | 0607 |
| Gurage (resting) | > | 1154 | O | 10109 | · C | . | 101 | 27.18 |
| rotal | 0 | 22.657 | 2961 | 41120 | 2581 | 248 | 8 | 11299 |
| East Germany | | | | | 1 | 2 | 620 | 70226 |
| Air Force | 0 | 1258 | C | c | 194 | ć | , | |
| Ė | | | • | > | TCO | 12 | 25 | 1429 |
| nungary | | | | | | | - | |
| Alr Force | 0 | 5784 | 0 | 17721 | 1124 | 189 | פאר | |
| Trining | 0 | 2335 | 1554 | 0 | 187 | 9 (| D (4 | 20.4% |
| Clvll Aviation | 0 | 2116 | 0 | 0 | - C | > C | လ လ | 4139 |
| Total | 0 | 10235 | 1554 | 17721 | ווצו | | 94 | 2150 |
| Poland | | | ! | 1 | 1701 | 887 | 246 | 31256 |
| Air Force | 0 | 13257 | c | 409%8 | 6 | 1 | | |
| Naval Aviation | 0 | 0 | o C | 2052 | 37.00 | 299 | 341 | 57775 |
| Training | 0 | 5814 | 1162 | 200 | 145 | 21 | ည | 3104 |
| Civil Aviation | 0 | 4233 | 770 | > · | 24.6 | 0 | 147 | 97.14 |
| MAP Aircraft (testing) | · C | 9 | > c | 0 0 | 0 | 0 | 69 | 4302 |
| Total | | 02204 | 0 | 285 | 0 | 0 | es. | 984 |
| | > | #Occ. 7 | 3277 | 44173 | 4039 | 588 | 564 | 75879 |
| TI MICHIEL TO | • | | | | | | | |
| Projector | 0 (| 6266 | 0 | 16244 | 1499 | 25.2 | 157 | 0.17.0 |
| STITUTE OF THE STATE OF THE STA | 5 7 (| 1397 | 1589 | 0 | 179 | i C | - 07 | 07442 |
| HOTORY TARA | 0 | 3174 | 0 | 0 | C | » c | O 4 | 0770 |
| Tanor | 0 | 10837 | 1589 | 16244 | 1678 | 252 | 56 257 | 32.26 |
| Total Buropean Satellites | c | 05030 | 0000 | 000 | 1 | } | 3 | 9 0000 |
| | : | 0.000 | TOSOO | 136979 | 12151 | 1785 | 1986 | 248271 |

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STIMATED ANNUAL CONSUMPTION OF PETROLEUM PRODUCTS

ENGINEAR SATELLITE AIR FORCES - 1954

| | Avi | Aviation Gasoline | | | i. | | Met | Metric Tons |
|--|---------------|-------------------|-----------------------|----------|----------------|-------------|------------|-------------|
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Inhaicente | ⊕ 10+0 } |
| Albania | | ī | | | | | CATTON TON | 1000 |
| Air Force | 0 | 210 | 0 | 0 | 0 | 21 | 4 | 235 |
| Bulgaria | , | | | | | | • | V ** |
| Alr Force | 0 | 10845 | 0 | 17721 | 2248 | 378 | 251 | 31443 |
| Traing | 0 | 5258 | 1136 | 0 | 448 | 0 | 104 | 6946 |
| Civil Aviation | 0 | 1905 | 0 | 0 | 0 | 0 | 31 | 1936 |
| Total | 0 | 18008 | 1136 | 17721 | 2696 | 378 | 386 | 40325 |
| Czechoslovakia | | | | | | | |) |
| Air Force | 0 | 9328 | 0 | 48731 | 2498 | 420 | 277 | 61254 |
| Training | 0 | 4392 | 34.75 | 0 | 393 | 0 | 128 | 4 8 8 8 |
| Civil Aviation | 0 | 8041 | 0 | 0 | 0 | o C | ר א ר א | 97.0 |
| MAP Aircraft (testing) | 0 | 875 | 0 | 14086 | 0 |) C | 425 | 24000 |
| Total | 0 | 22636 | 3475 | 62817 | 2891 | 420 | 573 | 92812 |
| East Germany | | | | | | : - | | i i |
| Air Force | 0 | 1887 | 0 | 0 | 375 | 63 | 38 | 2363 |
| 71 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | | | | | | |
| Mangar y | c | | | | | | | |
| ALL FOLGE |) (| 6099 | 0 | 29534 | 1499 | 252 | 187 | 38081 |
| raing Gari Arioti | > (| 1897 | 1754 | 0 | 183 | 0 | 59 | 3893 |
| HOTO BIATATA | 0 | 9112 | 0 | 0 | 0 | 0 | 34 | 2150 |
| Total | 0 | 10622 | 1754 | 29534 | 1682 | 252 | 280 | 44124 |
| Poland | | | | | | | | |
| Air Force | 0 | 12144 | 0 | 55834 | 3622 | 609 | 347 | 72556 |
| Mayal Aviation | 0 | 0 | 0 | 2953 | 125 | 21 | വ | 3104 |
| Traing | 0 | 7021 | 3711 | 1054 | 589 | 0 | 177 | 12552 |
| Civil Aviation | 0 | 4233 | 0 | 0 | 0 | 0 | 69 | 4302 |
| MAP Aircraft (testing) | 0 | 0 | 0 | 4984 | 0 | 0 | æ | 4992 |
| Total | 0 | 23398 | 3711 | 64825 | 4336 | 630 | 909 | 97506 |
| Rumania | | | | | | , | | |
| Alr Force | 0 | 6829 | 0 | 23627 | 1624 | 2.73 | 176 | 22.20 |
| Training | 0 | 1397 | 1403 | 0 | 140 | 0 | 2.4 | 2000 |
| Civil Aviation | 0 | 3174 | 0 | 0 | 0 | 0 | 523 | 3226 |
| Tota1 | 0 | 11200 | 1403 | 23627 | 1764 | 273 | 273 | 38540 |
| Total European Satellites | 0 | 87961 | 11479 | 198524 | 13744 | 2037 | 2160 | 315905 |
| | | | | | | | | 1 |

Table C-2
ESTIMATED ANNUAL CONSUMPTION OF PETROLEUM PRODUCTS
RIROPKAN SATELITY ATP ROPORS 1965

| | | | | | The second secon | | | |
|---------------------------|---------------|------------|-----------------------|----------|--|------------------|-------------|--------|
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Bas | Tuhainanta | |
| Albania . | | | | | | TODE TOOGT | SOTTEST TOP | FRIOT |
| Air Force | 0 | 210 | 0 | 0 | 125 | 21 | 4 | 360 |
| Bulgaria | | | | | | | Ī |) |
| Air Force | 0 | 11124 | Φ | 22151 | 2248 | 378 | 285 | 22122 |
| Training | 0 | 4608 | 1436 | 0 | 302 |) • | 3 | 90700 |
| Civil-fristion | 0 | 1905 | 0 | 0 | 3 | > C | 66 | 0440 |
| Total | 0 | 17637 | 1436 | 22151 | 2550 | 378 | 395 | 74547 |
| Czechoslovakia | | | | | | <u>,</u> | 3 | 12027 |
| Air Force | c | 0620 | c | 50 | i i | • | ; | |
| Transland | > 0 | 0.00 |) t | 77.000 | 2748 | 462 | 289 | 68204 |
| | > (| 6483 | 2.94.3 | 4218 | 682 | 0 | 159 | 14485 |
| CIVIL AVIECTOD | 0 | 8041 | 0 | 0 | 0 | 0 | 131 | 8172 |
| MAP Aircraft (testing) | 0 | 0 | 0 | 14086 | 0 | O | 23 | 14109 |
| Total | 0 | 23852 | 2943 | 73681 | 3430 | 462 | 602 | 104970 |
| East Germany | | | | | | | | |
| Air Force | 0 | 1887 | 0 | 0 | 375 | 63 | 38 | 2363 |
| Hungary | | | | | | | | • |
| Air Force | 0 | 6099 | 0 | 29534 | 1489 | c | 187 | 06062 |
| Training | 0 | 2176 | 2005 | C | 506 | 9 9 9 9 | 3 | 67010 |
| Civil Aviation | 0 | 2116 | 0 | C | 9 | 3 C | 8 8 | OT/# |
| Total | 0 | 10901 | 2005 | 29534 | 1200 | 000 | 0.00 | ners |
| Poland | • | 1 | 2 | H 0002 | 901 | 707 | 888 | 44689 |
| Air Force | c | 96.98 | • | | | ; | | |
| Nows Artication | > 0 | 60009 | > (| 48/01 | 2622 | 609 | 288 | 78855 |
| mayar mylacion | > 0 |) | o | 2953 | 125 | 23 | ຄ | 3104 |
| Springer | Э • | 97.09 | 3540 | 2109 | 586 | 0 | 160 | 12471 |
| STATE AVIBITION | o (| 4233 | 0 | 0 | 0 | 0 | 69 | 4302 |
| MAR Alrerait (testing) | 0 | 0 | 0 | 4984 | 0 | 0 | 80 | 4 992 |
| Total | | 35914 | 3540 | 58777 | 4333 | 630 | 530 | 103724 |
| Rumania | | | | | | | | |
| Air Force | 0 | 7188 | 0 | 25842 | 1499 | 252 | 191 | 34979 |
| Training | 0 | 1397 | 1403 | 0 | 140 | 0 | 45 | 2985 |
| Civil Aviation | 0 | 3174 | 0 | 0 | 0 | 0 | 52 | 3226 |
| fotal | 0 | 11759 | 1403 | 25842 | 1639 | 252 | 288 | 41183 |
| Total European Satellites | 0 | 102160 | 11327 | 209985 | 14160 | 2058 | 2146 | 341836 |

S-E-C-R-E

Naval Aviation Training Civil Aviation

Units

Location of

Total Communist China and Asiatic Satellites

Training Total

North Kores

Tota1

Training Total

North Korea

Location of Units

Air Force

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Page 3 of 6 Pages

| | | ESTIMATED COMMUNIST CHI | ESTIMATED ANNUAL CONSUMPTION OF PETROLEUM PRODUCTS COMMUNIST CHINA AND ASIATIC SATELLITE AIR FORCES - 19 | TION OF PETROI SATELLITE AII | FIMATED ANNUAL CONSUMPTION OF PETROLEUM PRODUCTS NIST CHINA AND ASIATIC SATELLITE AIR FORCES - 1952 | | | |
|---|-----------|----------------------------|--|---------------------------------|--|-------------|--------------|---------------|
| | Avi | Aviation Gasoline | ine | 21 | | | + 9 1 | Matrice acres |
| Location of Units | Grade 100 | Grade 95 | Less than Grade 95 | Jet Fuel | Motor Gasoline | Diesel Fuel | Lubricants | Total |
| China | | : | | | | | | |
| Air Force | 0 | 33171 | 0 | 94931 | 6370 | 101 | 843 | 136386 |
| Mayal Aviation | 0 | 0 | 0 | 0 | 0 | 0 | 2 | |
| Iraing | 0, | 0 | 1672 | 0 | 83 | 0 | 27 | 1782 |
| Clv1 Aviation | 0 | 3809 | 9284 | 0 | 0 | 0 | 213 | 13306 |
| rotal | 0 | 36980 | 10956 | 94931 | 6453 | 1071 | 1083 | 151474 |
| North Korea | | | | | | | | |
| Alr force Training | 00 | 0 | 0 (| 0 (| 0 (| 0 | 0 | 0 |
| Total | 0 | 0 | 0 | | 0 | 00 | 00 | 0 |
| | | | | | | | | , |
| Total Communist China and Asiatic Satellites | 0 | 36980 | 10956 | 94931 | 6453 | 1071 | 1083 | 151474 |

S-E-C-R-E-I

Naval Aviation Training Civil Aviation

Air Force

Tota1

Location of Units

Total Communist China

Training Total

North Korea

Naval Aviation Training Civil Aviation

Air Force

Tota1

Location of Units

Total Communist China and Asiatic Satellites

Training Total

North Korea

| Aviation | | | | Table C-3 | C-3 | | Page | Page 6 of 6 Pages | |
|--|---|-----------|-------------|---------------------------------|---------------------------------|----------------------------------|----------|-------------------|----------|
| Marietion Arietion Case than Macro Case Pase | | | ESTIMATED A | NNUAL CONSUMPS A AND ASIATIC | PION OF PETROI SATELLITE AIR | LEUM PRODUCTS R FORCES - 1955 | | | |
| Martion Ariation Ariation Ariation Ariation Ariation Loss than Mattrion Diesel Fuel Libricantes Libricante | | | | | | | | | |
| Loss than Loss | | ΑνΊε | | ou. | | | | Met. | ric Tons |
| 11 12 13 15 15 15 15 15 15 15 | Location of Units | Grade 100 | വ | Less than Grade 95 | Jet Fuel | Motor Gasoline | | Lubricants | Tota1 |
| Trigition 1999 28773 0 109453 0 1459 11034 0 1450 1450 1450 1450 1450 1450 1450 1 | China | i (| : : | ¢ | 0.000 | | 121 | 740 | 7.000 |
| The control of Section | Alr Force Mercel Aristics | CCST | 28773 | - - | 69495 | 6745 500 | #PTT | 9/4 85 | 572//T |
| type 0 0 0 0 0 144 22 common value 0 3851 1855 1857 1874 231 132 4 common value 0 1407 268 3163 242 0 32 4 32 4 | rayar nyracron Training | 00 | 9505 | 2876 | 24257 | 1832 | , 0 | 241 | 38711 |
| ce 0 3201 0 36637 1374 23 ce 0 3201 0 36637 1374 23 132 4 ce 0 1407 268 3163 242 0 32 otal 0 4608 268 39800 1616 231 164 dist Chira and tellites 1956 54927 3540 209410 10693 1449 1508 28 146. | Civil Aviation | 0 | 8465 | 396 | 0 | 0 | 0 | 144 | 800 |
| 9. 520 | Total | 1955 | 50319 | 3272 | 169610 | 9077 | 1218 | 1344 | 23679 |
| 1956 54927 268 3163 242 0 32 0 4608 268 39800 1616 231 164 4 1955 54927 3540 209410 10693 1449 1508 28 | North Korea | c | 4901 | Ç | 48847 | 1374 | 231 | 132 | 41575 |
| 1955 54927 3540 1616 231 164 4 1955 54927 3540 209410 10693 1449 1508 28 164 4 1855 54927 3540 209410 10693 1449 1508 28 186. | Training | . 0 | 1407 | 268 | 3163 | 242 | 0 | 32 | 5113 |
| 1955 54927 3540 209410 10693 1449 1508 166. 166. 168. 168. 168. 168. 168. 168. 168. 168. 168. 168. 168. 168. 1508 | Tota1 | 0 | 4608 | 268 | 39800 | 1616 | 231 | 164 | 46687 |
| the. S=B_C_R=B_T | Total Communist China and Asiatic Satellites | 1955 | 54927 | 3540 | 209410 | 10693 | 1449 | 1508 | 283482 |
| te. S. B. C. B. E. E. T. S. B. C. B. E. | | | | | | | | | |
| th6. S_B_C_R_B_T | | | | | v | | | | |
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| S_B_C_R_B_T | | | | ₹ | • • | | | | |
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